

Advisory Circular

AC NO: 23-8A

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FLIGHT TEST GUIDE FOR CERTIFICATION OF PART 23 AIRPLANES















Advisory Circular

Subject: FLIGHT TEST GUIDE FOR

CERTIFICATION OF PART 23

AIRPLANES

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Change:

1. PURPOSE.

a. This advisory circular (AC) provides information and guidance concerning acceptable means, but not the only means, of showing compliance with Part 23 of the Federal Aviation Regulations (FAR) concerning flight tests and pilot judgments. Accordingly, this material is neither mandatory nor regulatory in nature and does not constitute a regulation.

- b. This AC is one method being utilized to achieve national standardization in normal, utility, acrobatic, and commuter airplane certification.
- c. This material is intended as a ready reference for Part 23 airplane manufacturers, modifiers, Federal Aviation Administration (FAA) design evaluation engineers, flight test engineers, and engineering flight test pilots, including Delegation Option Authorization (DOA), Designated Alteration Station Authorization (DAS), and Designated Engineering Representative (DER) personnel.
- 2. <u>CANCELLATION</u>. AC 23-8, Flight Test Guide for Certification of Normal, Utility, and Acrobatic Category Airplanes, dated October 20, 1987, is cancelled.
- 3. GENERAL. This AC covers flight test items of interest during type certification. Other engineering disciplines, such as airframes, systems and equipment, and propulsion are addressed as they pertain to flight test criteria.
- 4. <u>BACKGROUND</u>. AC 23-8, Flight Test Guide for Certification of Normal, Utility, and Acrobatic Category Airplanes, was published to replace FAA Order 8110.7, Engineering Flight Test Guide for Small Airplanes, dated June 20, 1972, and to consolidate existing flight test policy. AC 23-8 did not cover commuter category airplanes.

5. APPLICABILITY.

a. These methods and procedures are promulgated, in the interest of standardization, for use during all normal, utility, acrobatic, and commuter category airplane flight test certification activities. This material is not to be construed as having any legal status and must be treated accordingly. The procedures set forth herein are one acceptable means of compliance with applicable sections of Part 23.

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Like all AC material, these guidelines are not mandatory and do not constitute regulations. They are derived from previous FAA experience in finding compliance with the airworthiness requirements and represent the methods and procedures found to be acceptable by that experience. Since these methods and procedures are only one acceptable means of compliance, individuals should be guided by the intent of the methods provided in this AC. Any alternate means proposed by the applicant will be given due consideration. Applicants should contact their Aircraft Certification Office (ACO) to determine the acceptability of proposed methods.

- b. This AC covers the latest Part 23 amendments through amendment 23-34 which includes commuter category airplanes. Each paragraph has the applicable Part 23 amendment shown in the title. Prior amendments may require separate procedures and guidance. Applicants should contact their ACO for information concerning policies applicable to prior amendments of Part 23 and Civil Air Regulations (CAR 3).
- c. Sections entitled "Reserved" will be filled in when the material is developed.
- 6. <u>RELATED PUBLICATIONS</u>. Certification personnel should be familiar with FAA Order 8110.4, "Type Certification," and FAA Order 8100.5, "Aircraft Certification Directorate Procedures." In this AC, reference is made to other FAA AC's which give guidance on various aspects of type certification and supplemental type certification.

7. HOW TO OBTAIN. Copies of AC 23-8A may be ordered from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 or from any of the Government Printing Office bookstores located in major cities throughout the

United States

BARRY D. CLEMENTS

Manager, Small Airplane Directorate

Aircraft Certification Service

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